

PRIMARY USE: Minimize bank erosion.

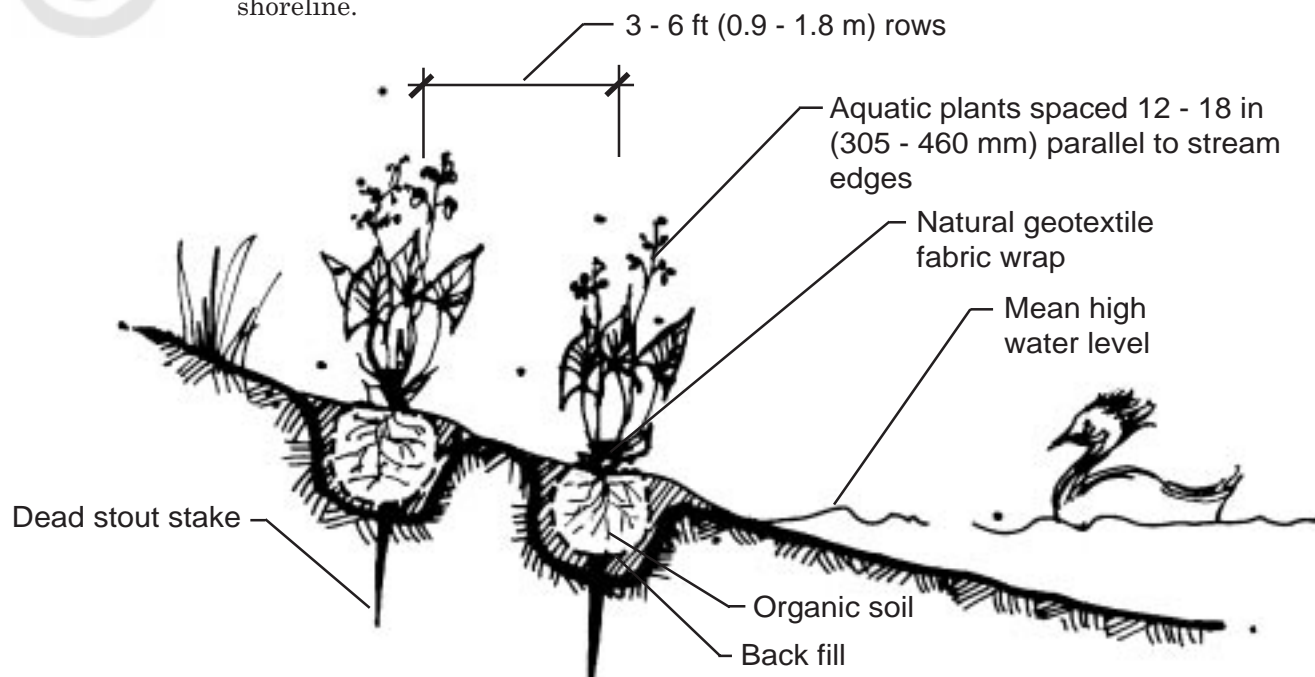
ADDITIONAL USES: Improves habitat for aquatic plants and animals.

REED BANKS

What is it? A reed bank is a plant community that is rooted in the gradual slope of the bank or in the bed of shallow streams.

Purpose

The planting of reeds is the best prior condition for establishing an aquatic plant zone because the reed create a dense, energy-dissipating area. Reeds offer immediate and relatively inexpensive protection from erosion by trapping soil and transported sediment at the shoreline.



**Reed Bank / Reed Dump
Section View**

Limitations

Sufficient light and a slow current are required. The shade of trees growing along the banks of narrow streams prevents the development of aquatic plants. On the other hand, if the plants become too luxuriant, the water flow can be slowed, causing the stream to overflow in the highwater season. Maintenance may include cutting back of reeds.

Materials

Appropriate plant materials, suitable to climatic zone which are either selectively harvested from existing natural sites or purchased from a nursery. The reed clumps should be 4-8 in (102-203 mm) in diameter, wrapped in natural geotextile fabric and bound together with twine. Dead stout stakes are also required.

Installation

To plant in clumps, aerial organs of the reed colony are cut, then square clumps are cut out. These are placed in a pit prepared in advance with a 1 in (25 mm) layer of highly organic topsoil. The clumps are planted every 12 in (305 mm) to a depth of 2/3 of their height by filling the remainder of the trench between and around the reed clumps with highly organic topsoil. Wrap geotextile fabric from each side to overlap at the top and leave the reed clumps exposed before securing with dead stout stakes. Spread previously excavated soil around the exposed reed clumps to cover this staked fabric.

Source: Freshwater: Three Studies, Seibert; Engineering Field Handbook, NRCS.

REED BANKS

Installation guideline continued:

To plant rhizomes and shoots, slips are taken from existing beds during dormant season after the aerial organs have been cut. Rhizomes and shoots are placed in holes or narrow trenches along the line of the average summer water level. To plant reed rolls, install a row of stakes. Uphill from these, dig a trench approximately 20 in (508 mm) wide and deep. Wire netting is stretched from both sides of the trench between upright planks. On this netting fill material is dumped. This is then covered with reed clumps until the two edges can just be held together with wire. The upper edge of the roll should be no more than 2 in (51 mm) above the level of the water. The planks are removed and any gaps are filled with earth.